

## Horn's Bruchidae Type-Material in the Ulke Collection (Coleoptera)

CLARENCE D. JOHNSON

*Northern Arizona University, Flagstaff*

As pointed out by Bottimer (1968) and Johnson (1968), problems exist concerning the location of type-specimens of G. H. Horn's bruchid species. Both Bottimer and Johnson designated lectotypes and indicated that specimens forming the basis for Horn's species descriptions were deposited in the LeConte Collection, Harvard University, Cambridge, Mass. (MCZ); The Academy of Natural Sciences, Philadelphia, Pa. (ANS); The California Academy of Sciences, San Francisco, Calif.; and the Ulke Collection, Carnegie Museum, Pittsburgh, Pa. This paper is an attempt to clarify further where bruchid types are located by describing Horn bruchid type-material in the Ulke Collection.

A study of the Bruchidae in the Ulke Collection revealed that it contains specimens of 27 Horn species. Of these, one is the holotype of *Sennius discolor* (Horn), one is perhaps a type of *Cercidiestes ulkei* (Horn), others are possible syntypes of other Horn species and some cannot be considered as types. According to G. E. Wallace, the small, red, square or rectangular pieces of paper attached to some of the specimens are possibly the specimens examined by Horn. These bits of paper, the locality labels, the determination labels, and a comparison of the specimens with the original descriptions were used in determining whether the specimens were indeed types.

### HORN BRUCHID TYPE-MATERIAL IN THE ULKE COLLECTION

(1) Below are the Horn specimens that merit special discussion to clarify their status as type-material.

*Acanthoscelides perforatus* (Horn), 1873. Two specimens. One has the labels "Va." and "*Bruchus perforatus* Horn" attached to it. The other has the labels "Md." and "*perforatus* H. type" attached to it. Neither of these conform to Horn's published type-locality of "Arizona" and an "unknown locality" and neither can be considered as a type.

*Cercidiestes ulkei* (Horn), 1873. One specimen. Attached labels: "Ariz.," "red square," "*ulkei* Horn." From Horn's original description of this species it is not possible to determine whether more than one specimen was described. As both this specimen and the specimen labeled type and deposited in the MCZ (Johnson 1968) are members of the same species, problems should not develop concerning species concepts.

*Megacerus impiger* (Horn), 1873. Two specimens. One has the labels "Cal.," "red square," "*Bruchus ramicornis* Boh. = *impiger* Horn" attached to it. This specimen and the specimens deposited in the MCZ and ANS (Johnson 1968) should be examined by the first revisor of the genus before a lectotype is selected. The other specimen is labeled "Ariz." and cannot be considered as a type as it is not from Horn's published type-locality.

*Merobruchus julianus* (Horn), 1894. One specimen. Attached labels: "San Julio," "Typical spec," "*Bruchus julianus*." This specimen is evidently a syntype.

*Sennius discolor* (Horn), 1873. One specimen. Attached labels: "Tex," "red square," "*Bruchus discolor* Horn type." I consider this specimen to be the holotype of this species as it conforms to Horn's original description and statement "One specimen from Texas in the cabinet of Mr. Ulke."

(2) Listed below in the genus to which they are presently assigned are specimens of species that could be considered as syntypes because they have both the correct type-locality label and a red, square or rectangular label attached to them. (The publication date of the original species description, if other than 1873, is in parentheses in the following lists.)

*Acanthoscelides alboscuteclatus*, *A. aureolus*, *A. floridae*, *A. fraterculus*, *A. longistilus*, *A. seminulum*, *Merobruchus placidus*, *Mimosestes amicus*, *Sennius cruentatus*, *Stator pruininus* and *Stylanthus macrocerus*.

(3) Specimens of the following species have labels attached to them which indicate they are from the type-locality, and, for this reason may be syntypes, but they do not have a red, square or rectangular label attached to them.

*Acanthoscelides calvus*, *A. exiguus* and *Sennius bivulneratus*.

(4) The following species are represented by specimens but the locality label is not that published by Horn and they cannot be considered as types.

*Acanthoscelides bisignatus*, *A. distinguendus*, *Sennius nigrinus*, *Stator limbatus*, *S. sordidus*, *Zabrotes obliterated* (1885), *Z. spectabilis* (1885) and *Z. subnitens* (1885).

#### SPECIMENS OF SPECIES OF OTHER AUTHORS

Specimens of species of authors other than Horn (some with red, square or rectangular labels attached to them) are pinned after the following labels in the Ulke Collection.

*Bruchus pisi* Linnaeus, *B. mimus* Say, *B. scutellaris* Fabricius, *B. quadrimaculatus* Fabricius, *B. discoideus* Say, *B. coryphae* Olivier, *B. desertorum* LeConte, *B. pauperculus* LeConte, *B. prosopis* LeConte, *B. uniformis* LeConte, *B. obsoletus* Say, *B. hibisci* Olivier and *B. musculus* Say.

#### ACKNOWLEDGMENTS

I wish to thank G. E. Wallace, Carnegie Museum, for lending me the specimens for this study.

Financial assistance for this paper was provided by the Entomology Research Division, U. S. Department of Agriculture, under Grant 12-14-100-9187 (33).

#### LITERATURE CITED

- BOTTIMER, L. J. 1968. On the location of types of five species of Bruchidae with notes on early American literature of *Acanthoscelides obtectus*. *Can. Entomol.*, 100 (3): 284-9.
- HORN, G. H. 1873. Revision of the Bruchidae of the United States. *Trans. Amer. Entomol. Soc.*, 4: 311-42.
1885. Contributions to the coleopterology of the United States. *Ibid.*, 12: 128-62.
1894. The Coleoptera of Baja California. *Proc. Calif. Acad. Sci.*, 4: 302-449.
- JOHNSON, C. D. 1968. Bruchidae type-specimens deposited in United States museums, with lectotype designations. *Ann. Entomol. Soc. Amer.*, 61 (5): 1266-72.

#### ZOOLOGICAL NOMENCLATURE: Announcement A. (n.s.) 82

Required six-month's notice is given on the possible use of plenary powers by the International Commission on Zoological Nomenclature in connection with the following names listed by case number:

(see *Bull. zool. Nomencl.* 25, pt. 2/3, 27 September 1968):

1838. Type-species for *Oligolophus* C. Koch, 1872 (Arachnida).
1843. Validation of *Aphis gossypii* Glover, 1877 (Insecta, Hemiptera).
1845. Type-species for *Anoplius* Dufour, 1834; Neotypes for *Sphex niger* Fabricius, 1775, and *Sphex nigerrimus* Scopoli, 1763 (Insecta, Hymenoptera).
- (see *Bull. zool. Nomencl.* 25, pt. 4/5, 17 January 1969):
1852. Suppression of *Siphocoryne angelicae* del Guercio, 1911 (Insecta, Hemiptera).
1853. Validation of emendation to *Hyposmocoma* of *Hyposmochoma* Butler, 1881 (Insecta: Lepidoptera).

Comments should be sent in duplicate, citing case number, to the Secretary, International Commission on Zoological Nomenclature, c/o British Museum (Natural History), Cromwell Road, London S. W. 7, England. Those received early enough will be published in the *Bulletin of zoological Nomenclature*.— W. E. CHINA, *Acting Secretary to the International Commission on zoological Nomenclature*.